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In the claims:

Please amend the claims as shown below:

1. (Original) A sensor device comprising:  
5 a roller (36) in operative engagement with a housing (24);  
a peltier element (38, 38.1) attached to the housing (24) and  
having a cooled surface (41) and a heated surface (43), the  
peltier element being connected to a power source (14) to  
obtain a temperature difference between the cooled surface and  
10 the heated surface thereof, the surface (41) being cooled by  
the peltier element and the inner surface (43) being heated by  
the peltier element and directed in a direction that is  
opposite the direction of the surface (41), the surface (41)  
being in operative engagement with the roller (36) to cool the  
15 roller (36).

2. (Original) The sensor device according to claim 1 wherein  
heat is led away from the heated surface (43) and the surface  
(43) is in contact with the housing (24) that has a high heat  
20 conductivity and formed with an area of flanges (28) in order  
to increase heat transfer to another medium that is in contact  
with the flanges (28).

3. (Original) The sensor device according to claim 1 wherein  
25 the segment (24) is in operative thermal contact with a volume  
(25) containing another material (27) that has high thermal

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capacity and stores heat from the inner surface (43).

4. (Original) The sensor device according to claim 1 wherein  
a peltier element (38, 38.1) is held against the housing (24)  
5 by a holder 30 made of a material with low heat conductivity.

5. (Original) The sensor device according to claim 1 wherein  
a cover plate (42), in contact with the peltier element, bears  
against a surface of the roller (36).

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6. (Original) The sensor device according to claim 5 wherein  
the peltier element (38, 38.1) is in operative engagement with  
the cylindrical outer surface of the roller (36).

15 7. (Original) The sensor device according to claim 1 wherein  
the roller (36) is rotatably attached to a housing (24) and is  
made of a material with high heat conductivity.

8. (Original) The sensor device according to claim 6 wherein  
20 the roller (36) is in contact with an isolation material (29)  
that is cooled by the peltier element (38.1).

9. (Currently) A sensor device comprising:  
a peltier element (38) held by a holder (30) ~~threadedly~~  
25 attached by threads to an outer end (26) of a housing (24);  
the peltier element (38) being in contact with the housing

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(24) and disposed on the outer end (26);  
the peltier element having a cooled surface (41) and a heated surface (43), the peltier element being connected to a power source (14) to obtain a temperature difference between the cooled surface and the heated surface thereof, the surface (41) being cooled by the peltier element and the inner surface (43) being heated by the peltier element and directed in a direction that is opposite the direction of the surface (41); the surface (41) providing a cooled testing surface, the surface (43) being in contact with the housing (24) that has a high heat conductivity for effectively transferring heat from the surface (43) and the housing (24) having a volume for absorbing the heat, the housing having a surface formed with an area of flanges (28) in order to increase heat transfer to another medium that is in contact with the flanges (28); the holder (30) being made from a material with a low heat conductivity, that is lower than the high heat conductivity of the housing (24), to avoid heat transfer between the cold surface (41) and the hot surface (43); and  
~~the housing having a cavity (25) defined therein, the cavity (25) containing a material (27) having a high thermal capacity higher than a thermal capacity of the housing (24) for storing heat from the inner surface (43).~~

10. (Original) The sensor device according to claim 9 wherein the sensor device has a cover plate (36) held by the holder

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(30).

11. (New) The sensor device according to claim 9 wherein  
the housing has a cavity (25) defined therein, the cavity  
5 (25) contains a material (27) that has a high thermal  
capacity higher than a thermal capacity of the housing (24)  
for storing heat from the inner surface (43).